

BRUSH TYPE SMALL MOTOR HAVING  
NON-LINEAR SPRING DEVICE  
ABSTRACT OF THE DISCLOSURE

5 A spring device consists of a coil spring case formed of right, left,  
back and front side plates and a spring receiving plate, a coil spring  
having a liner spring property, and a spring urging member for  
urging the coil spring into the coil spring case. A distance between  
the right and left side plates of the spring case is set a little larger  
than an outer diameter of the coil spring. A distance between the  
10 back and front side plates of the spring case is set about 1.5 to 2 times  
larger than the outer diameter of the coil spring, and a length of the  
spring case is set smaller than a free length of the coil spring. The  
coil spring is deformed and a non-linear spring property is obtained  
when the coil spring is urged through the spring urging member.

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